



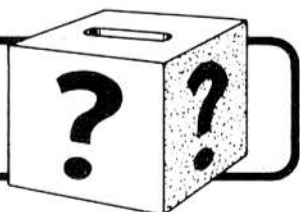
NUCLEAR DIVISION NEWS

A Newspaper for Employees of the Nuclear Division, Union Carbide Corporation

Vol. 5 - No. 3

February 7, 1974

QUESTION BOX



If you have questions on company policies, benefits, etc. or any other problems with which we might help, just let us know. Drop your inquiry to the Editor, Nuclear Division News. (Or telephone it to your plant news representative; see page 7). You may or may not sign your name. It will not be used in the paper.

Questions are referred to the proper authorities for accurate answers. Each query is given serious consideration for publication.

Answers may be given to employees personally if they so desire.

QUESTION: Why is it that nearly all of the departments in Y-12 have private kitchens that are fully equipped, including radar ovens? These kitchens are all locked up so that only top supervision gets to use them. Taxpayers' money is being spent for these kitchens, so why aren't they left open all the time, or better yet, who gave the approval for them to be installed in the first place? Could you tell me what branch of the AEC or government to contact to look into this wasteful and discriminatory practice.

ANSWER: Microwave ovens are provided by the ARA Canteen Service Company in those lunchrooms where they provide related hot food service. Carbide has installed additional ovens as well as refrigerators, with management approval, in those lunchrooms and in other locations. All of the lunchrooms and most of the other locations are accessible to all employees in the area where they are located. A few, however, are in areas most accessible to key supervisors and their associates. These few facilities are so located in order that these employees, who often work through lunch periods and after regular working hours, will lose a minimum amount of time and be inconvenienced as little as possible. The areas in which these few facilities are located are probably locked on off-shifts. The practice we are following is fairly common in industry and is not considered wasteful nor discriminatory. If you haven't already done so, you should discuss your complaint with your supervisor and see whether or not it can be resolved. If you are still not satisfied and think you must go outside our organization, the individual in AEC to contact would be the Director of the Manufacturing Division who is the AEC Contract Administrator for the Y-12 Plant.

QUESTION: With the drive on to conserve fuel and energy, why are certain employees permitted to drive government vehicles to the parking lots or the nearest portal to a parking lot and leave them overnight and on weekends while the

majority of us have to walk to and from the parking lots? I refer to the ones seen each morning in the North Portal and near building 9720-6 near East Portal lot.

ANSWER: They aren't as a rule. In some instances where an individual has multi-plant, off-plant, or after-hour responsibilities, it does happen. The large number of vehicles at the North Portal ties in with the Y-12 Utilities Department office, which is located and has its off-hour parking there. Similarly, 9720-6 is a major office and shop area for the Y-12 Maintenance Division and off-hour parking of their vehicles is at that location.

QUESTION: As a member of a church which observes the seventh day Sabbath (Saturday) I was required to take a day's vacation on January 5 in order to fulfill my religious convictions. What provisions does the Company make to meet the religious needs of those such as Orthodox Jews, Seventh Day Adventists, and others who are adversely affected by the alteration of the normal week by scheduling work on Saturday? Will there be any further deviation from the normal work-week of Monday through Friday this year? For example, December 23?

ANSWER: One of the reasons that the vacation plan was changed several years ago to permit fragmenting vacations was to allow employees who desired to do so to be off work on religious holidays or other days of special significance to them.

Saturday, January 5, 1974, which became a workday because of the change in schedule was taken as a day of vacation by a number of employees who, like you, wanted to be off work on that day for a variety of reasons including religious convictions. If such an employee wants to be off with no loss in pay, a fragmented vacation day is the way the Company recommends that it be done.

Although the week of December 23, 1974, does offer the possibility of a schedule change, which would make Saturday, December 28, a workday, at this time no decision has been made

(Continued on page 8)

John Clarke named director of Thermonuclear Division

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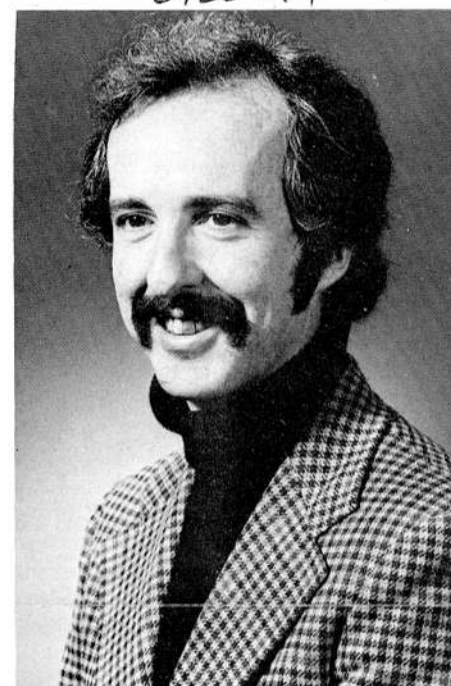
The appointment of John F. Clarke as Director of the Thermonuclear Division of the Oak Ridge National Laboratory has been announced by ORNL Director Herman Postma.

The appointment fills a position left vacant by Postma's appointment as ORNL Director January 1.

Clarke, a plasma physicist, joined the ORNL staff in 1967 immediately after receiving his doctor of science degree in fusion research from the Massachusetts Institute of Technology. Clarke also holds a B. S. degree from Fordham University in New York City (1961) and a M. S. degree in plasma physics (MIT 1964). He is originally from Long Island, N.Y.

Clarke is a member of the American Physical Society, the American Association for the Advancement of Science and of several Atomic Energy Commission review committees on the controlled thermonuclear research program.

He has served as group leader of the confinement physics group in the ORMAK section of the Thermonuclear Division. This group is responsible for the interpretation of results from the ORMAK device, the division's principal experiment.



John F. Clarke

Thermonuclear research is conducted at several laboratories in the United States and other nations. The eventual goal of these growing scientific efforts is the development, by about the turn of the century, of steam power plants that will generate electricity from the heat of the energy produced by fusing the nuclei of light atoms, namely the hydrogen isotopes, deuterium and tritium.

In addition to his primary responsibilities, Clarke has also been active in recruitment of personnel at ORNL and has served in an advisory capacity to the Laboratory's program planning and analysis office. He recently completed a term as a member of the editorial board of the publication "Review of Scientific Instruments." Clarke lives at 135 East Vanderbilt Drive, Oak Ridge.

Carbide sales hit new records in '73

Union Carbide Corporation's 1973 worldwide sales reached a new record of \$3.94 billion, 21 percent above the 1972 total of \$3.26 billion. Net income, also a new record, was \$291 million, or \$4.78 a share, based on preliminary figures. This is 42 percent higher than the corresponding 1972 amount of \$205 million, or \$3.38 a share.

Sales in the fourth quarter amounted to \$1,043 million, an increase of 19 percent over the 1972 fourth-quarter total of \$874 million. Net income was \$74 million, or \$1.22 a share, representing an increase of 37 percent over the \$54 million, or \$0.89 a share, earned in the fourth quarter of 1972.

In commending on the results, F. Perry Wilson, UCC's chairman of the board, pointed out that although the gain in net income over the prior year was substantial, the corporation's previous record was established in 1966 and earnings have been at a lower level in every year since then until 1973. He noted also that the improvement in earnings last year was not due to large increases in selling prices, as the corporation's domestic price index is estimated to have increased by less than two percent.

Next Issue

The next issue will be dated Feb. 21. The deadline is Feb. 12.

FEBRUARY 18 HOLIDAY

Nuclear Division employees will enjoy their second holiday of the new year, as the nation observes one of the new Monday holidays, this one the third Monday of February, or George Washington's birthday.

No employee is required to be at work unless his presence is required by security or continuous operations.

Nuclear Division employees enjoy 10 holidays a year. Our next scheduled day off will be Good Friday, April 12.

Energy conserving measures taken by the Nuclear Division

Since we are right in the middle of what has been termed "an energy crisis," the question may be asked, "just what is the Nuclear Division doing to conserve energy?"

Recent efforts to assess our energy requirements, how to prevent waste and how to use our energy resources more effectively, have been guided by a four-plant committee. The Energy Conservation Committee consists of Carl Peterson, the overall coordinator or chairman, and a coordinator from each of the four plants. They are Al M. Tuholsky, Paducah; Edward J. Witkowski, ORNL; George W. Oliphant, Y-12; and Edwin H. Krieg, ORGDP. Each plant coordinator has an energy conservation team, which consists of division coordinators.

The Energy Conservation Committee has as its purpose conservation of all forms of energy. The Committee developed a plan which has already achieved substantial energy reductions and through which further savings will be realized. This plan includes both short- and long-term practices designed to relieve the energy crises.

Results of these conservation efforts are documented in a monthly report. The report also compares current energy use with use during similar periods in previous years.

HEATING AND AIR CONDITIONING

Since the early 1960s, recirculating hot water from the gaseous diffusion separating cascade has been used to heat two of the four process system pump houses at Paducah, and the electrical switchhouses at ORGDP. A major study is now being made to determine the feasibility of heating other buildings with waste heat from the recirculating water system.

At ORNL, large air conditioning systems were adjusted during the last cooling season to eliminate most of the reheat used for humidity control. Employees have been instructed to turn off smaller units during non-working hours.

During the fall of 1973, 1,239 small electric space heaters were removed from offices throughout the Nuclear Division. These heaters were used by individuals who felt their offices were uncomfortably cold. To compensate for the inefficient heaters, permanent heating systems were improved, and additional insulation and other devices, such as weather stripping and storm windows, were installed.

Heating system thermostats in all occupied areas have been lowered to 68°F, and cooling system thermostats have been raised to 78°F. Temperatures in storage and unoccupied areas have been reduced to levels as low as possible without causing freeze damage to equipment.

These changes to heating and ventilating systems have reduced annual energy consumption by the equivalent of about two million kilowatt hours, which is enough energy to heat approximately 200 homes during an average winter.

LIGHTING

Incandescent street and fence lighting has been converted to more efficient mercury vapor units. This action created a net electrical savings of over 700,000 kilowatt hours per year. In addition, there was a dramatic reduction in maintenance cost since the lamp life was increased from six months to four years. There was also an increase of 85 percent in illumination level.

Lighting in other areas of the plant has been reduced to the level recommended by the Illumination Engineering Society. At Paducah, switches in all lighting cabi-



ENERGY CONSERVATION COMMITTEE — Attending a recent meeting of the Nuclear Division's Energy Conservation Committee were, seated from left, John E. Harding, Y-12; John A. Landry, AEC-ORO; Ken R. Jamison, ORNL; H. H. Haymond, ORNL; Edward J. Witkowski, ORNL; M. F. Schwenn, Purchasing; and Joe J. Varagona, ORNL. Standing from left, George Oliphant, Y-12; Carl H. Peterson, ORGDP; G. L. Copeland, ORGDP; William K. Simon, ORGDP; and Edwin H. Krieg, ORGDP.

nets have been marked to identify those that should be left off unless the area is occupied. This system is being installed at the other facilities.

The total energy saved in lighting conversion and level reduction is about 50 million Kwh per year, which is approximately enough energy to heat 5,000 Oak Ridge homes during an average winter.

OPERATION IMPROVEMENTS

Studies are now being conducted to determine what can be done to reduce steam transmission line losses. During warm weather when very little steam is used for heating, a large portion of the steam is used just to keep the steam lines hot. Hopefully, the studies will indicate the optimum line arrangements and result in a more compact, more efficient system.

At ORNL, steam system operators are being trained to check for defective steam traps by sonic and temperature measurement methods.

Insulation systems are being improved to reduce heat loss and transformer networks are being reconnected to minimize electrical losses.

Sixty-four laboratory hoods at ORNL were removed from service where they were no longer needed.

Timers and other automatic controls have been installed in many process systems to reduce temperatures during "idle" periods. At the Y-12 Plant, this change resulted in a 16 percent power reduction in one plant area alone, and saved over \$25,000.

Throughout the Division, innumerable small vacuum and ventilation systems are being turned off when not required for operation. Experiments in energy conservation have resulted in more efficient operation and reduced energy consumption.

USE OF MOTOR VEHICLES

Plans are being made to reconcile transportation needs with expected fuel supplies. An interplant gasoline rationing system has been put into effect. The

system involves the issuance of ration tickets in each division, based on the nature of vehicle usage and the amount of gasoline that will be made available to the Carbide plants in Oak Ridge.

Improvements have been made in the bus and shuttle services to compensate for reductions in other vehicle use. New shuttle routes have been developed which include stops at all three Carbide plants, Townsite and the AEC Office Building.

Vehicles necessary to the continued operation of the facilities are employing energy-conserving techniques. These include limiting speed to 50 miles per hour, eliminating periods of engine idling and limiting air conditioner use. Employees are also encouraged to share their vehicle with other employees who may be going to the same place.

The three-plant material delivery system started Monday, January 21. It provides five daily deliveries and pickups at two to three dock areas at each plant. The three-plant system goal is to minimize multiplant expediting at all three plants by translating customer requirements to prompt in-plant delivery regardless of Stores' location of materials.

Through these steps, the Nuclear Division hopes to reduce gasoline consumption by about 9,000 gallons per month.

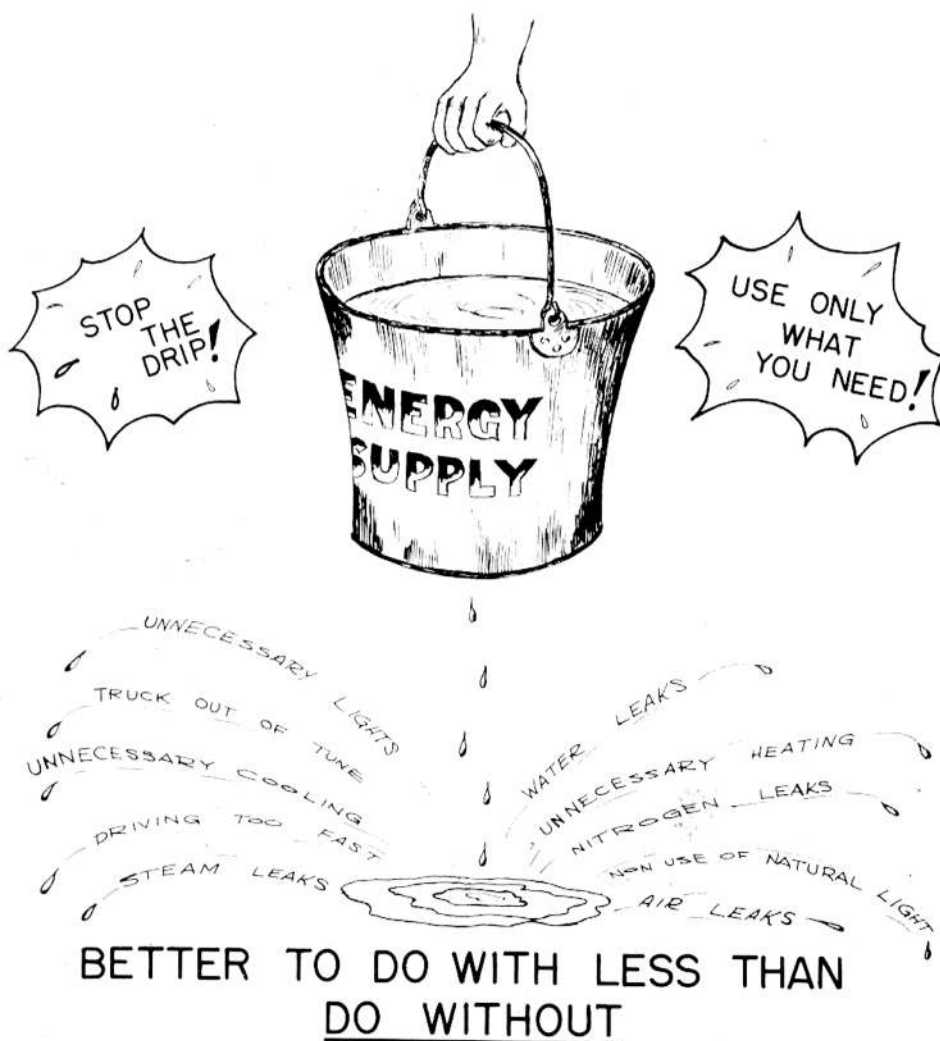
CAR POOLS

The Division is encouraging employees to utilize car pools as a means of traveling to and from work. David Pilati, ORNL, developed a computer program to match employees who live in the same geographical area. This program is being used by the facilities in Oak Ridge, and a modified version is being used at Paducah. Participation by employees is on a voluntary basis.

Even through car pools appear to be a rather small economy it has been estimated, on a national basis, that if vehicle utilization were increased from its present average of 1.6 to 2.5 passengers per car, a daily savings of 500,000 barrels of oil would accrue.

(Continued on page 8)

ENERGY CONSERVATION



Division Retirees

Several ORNLers retired February 1, including three members of the Laboratory Protection Division.



Ingalls

Charles S. Ingalls, a guard, retired with almost 28 years of company service credit. Ingalls lives at 2534 Larkwood Lane, Knoxville.



Rawlings

Owens

Edgar L. Rawlings Jr., was also a guard in the Laboratory Protection Division. His retirement came exactly 30 years to the day after he joined the company. His plans include "gardening a little, and fishing a lot." Rawlings and his wife, Gladys, live at 163 N. Alabama Road, Oak Ridge.

Ralph C. Owens, fire and guard captain, celebrated 30 years of service last June. Now that he is retired, Owens plans to do some traveling and spend more time with his five grandchildren. He and Jessie, his wife, reside at 405 Hardwicke Drive, Knoxville.

Paul E. Smith was a machinist in the Plant and Equipment Division. He has bought a cattle farm near Nashville, and his plans include fishing, hunting and renovating the old house (built about 1830) on his farm.

Tuneo Yamada retired as a senior research staff member of the Biology Division. His new address is Swiss Institute for Experimental Cancer Research, Bugnon 21, Lausanne, Switzerland.



Hammond

R. Phillip Hammond was director of the Nuclear Desalination Program at ORNL. Following his retirement from the Director's Division, Hammond plans to continue activities in research and consulting work. His new address is P.O. Box 1735, Santa Monica, Calif.



Gideon

James H. Gideon will retire as a guard in the Laboratory Protection Division at ORNL at the end of February. A native of Knoxville, Gideon attained 30 years of company service in October, 1973.

Following retirement, he plans to do some "handywork" around his home and for friends. He also hopes to fish quite a bit in his new boat. Gideon and his wife, Lucille, live at 3401 Hazelwood Road, Knoxville.



Conner

Mrs. Hickman

Two long-time ORGDP employees retired February 1, marking 29-year-plus careers here.

James G. Conner, a maintenance mechanic in the Maintenance Division, lives at 107 Jersey Lane, Oak Ridge.

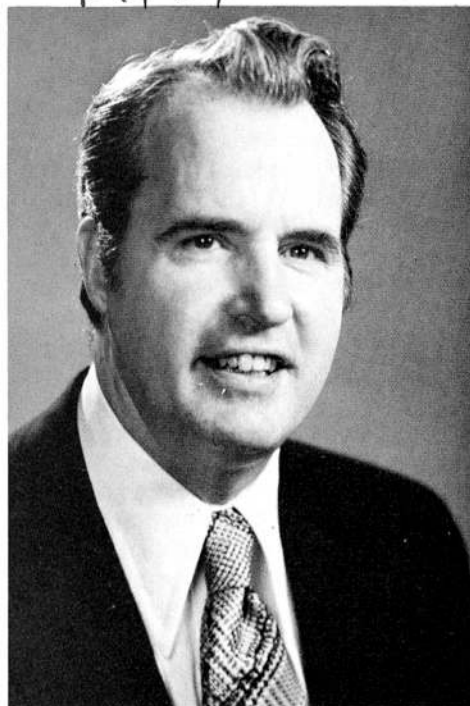
Grace K. Hickman, an analyst in the Laboratory Division, retires to her Route 5, Lenoir City, home.



Tidwell

George E. Tidwell, tool grinding department, retired from Y-12 recently, after nearly 29 years company service. A native of Bon Aqua, Tenn., he first worked at ORGDP, transferring to Y-12 in 1958. He retires to his 697 Robertsville Road, Oak Ridge, home.

Woy and Nash new recruiters in central employment office



Edgar A. Woy

Two major appointments have been made in the Central Employment Office of the Nuclear Division, Union Carbide Corporation.

Edgar A. Woy, of Oak Ridge, will be responsible for technical recruiting, and Earl J. Nash, of Knoxville, will be responsible for nontechnical recruiting. Both will report to W. Charles Kuykendall, manager of recruiting for the Nuclear Division.

Nash has been with the Nuclear Division since 1971, serving as coordinator for affirmative action programs at the Oak Ridge National Laboratory.

A native of Columbus, Ohio, he received a B. A. degree in sociology and M. A. in counseling and guidance from Southern University, Baton Rouge, La. He was a member of the staff of Southern University for 12 years, during which time he served as assistant dean of men, coordinator of financial aid, and director of high school recruitment.

Prior to joining the Nuclear Division he was associate dean of students at Knoxville College.

He is a member of the Board of Directors of the Urban League, and has served as one of the moderators of "Opportunity Line" on Knoxville television station WBIR.

He served for three years with the U. S. Army as a company commander at Camp Le Roy Johnson, La.

Nash is married to the former Norma Ballard, Opelousas, La. They live at 5110 Holston Dr., Knoxville, with their three daughters, Theaolecia, Miraquita and Verettia.

Woy, a native of Chattanooga, received his bachelor of science in chemistry from Virginia Military Institute. He served in the U. S. Air Force for two years as an aircraft controller, after being associated



Earl J. Nash

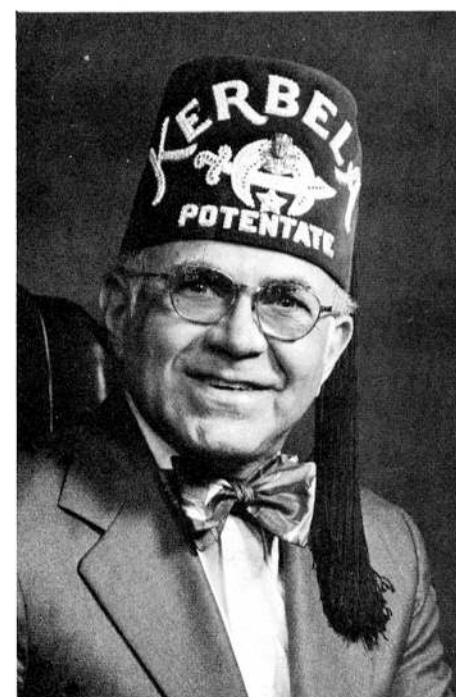
with Deering Milligan Textiles in Union, S. C., for about a year.

He joined Union Carbide's Nuclear Division in 1956 and since that time has been assigned to the works laboratory, engineering development, experimental barrier development and centrifuge development programs at the Oak Ridge Gaseous Diffusion Plant.

Since 1965, Woy has participated in the technical recruiting program. As part of his new responsibilities, he will also be responsible for the Nuclear Division's Co-Op program.

Woy is an active member of the Kiwanis Club of Oak Ridge.

He is married to the former Norma Johnson, Union, S.C. They live at 136 Normandy Rd., Oak Ridge, with their two daughters, Beth and Meg.



CHIEF EXECUTIVE SHRINER — George A. Holt, Instrumentation and Controls Division at ORNL, has been elected Illustrious Potentate of Kerbel Temple, Ancient Arabic Order, Nobles of the Mystic Shrine. In this office, Holt will guide the affairs of the organization which has 5200 members, and whose jurisdictional territory extends from Rockwood in Roane County to Mountain City in Johnson City.

ORNL SAFETY AWARDS

Oak Ridge National Laboratory recently held a drawing for safety awards earned during its third 120-day period without a loss time injury.

United States Savings Bonds with face value of \$25 were awarded to 358 employees. A list of the winners can be found on any official bulletin board in the ORNL complex.

COMPANY Service

20 25 30

Y-12 PLANT 30 YEARS

John L. Young Jr., Mary H. Jenkins, Malcolm P. Crews, Arthur O. Phillips, M. Kenneth Bernander, Arthur J. Snyder, Theodore Shapiro, Madison G. Cook, Richard E. Dew, Woodrow C. Munsey, Birdie F. Childs, Florence S. Archer, Sammie C. West, Charles A. Kienberger, James A. Martin and James A. Parsons.

25 YEARS

Clara S. Johnson and William C. Caldwell.

20 YEARS

Clifton J. O'Neal, Stanley V. Shepherd, Hobert N. Millican, Raymond C. Rapier, Wilburn D. Cunningham, Jack L. Williams, Claude W. Davidson, William H. Fleischman, Carl B. Redding, Roy E. Worley, George G. Cantrell, Earlie G. Lassater, Harold W. Jernigan, Melvin J. Sharp, Conrad S. Jones, Carl F. McLarrin and Everett F. Gambill.

ORGDP

30 YEARS

Rodney D. Shaffer, Essie L. King, James C. Murray, Robert L. Newton and James J. Petrucci.

20 YEARS

David E. Willis and Ulys Houston.

A. A. Toney named ORGDP section head



Arnold A. Toney

Arnold A. Toney has been named technical office services superintendent in the Finance and Materials Division at the Oak Ridge Gaseous Diffusion Plant. The appointment, made by J. Frank Jamison, was effective January 1, and transferred Toney from the Paducah Plant back to ORGDP. (He had previously worked there before transferring to Paducah when that plant opened.)

A native of Harlan County, Ky., Toney was office services supervisor at the Paducah Plant.

He is married to the former Mary Ogle, of Sevierville, and the couple recently moved to 105 East Malta Road, Oak Ridge. They have two sons, Byron, in the U. S. Naval Academy; and Randy, attending Oak Ridge High School.

Toney enjoys fishing and golf and is active in civic and various community functions.

Professional, technical societies prepare two-day energy conference at Regency Hyatt

Nuclear Division personnel will play an important role in the Engineers Week activities planned for the Oak Ridge - Knoxville area the week of February 17-23. The activities are sponsored by some 16 professional engineering and technical societies in which Nuclear Division personnel are well represented.

One of the highlights of the week will be the Welding and Testing Technology Exhibition and Conference (WATtec) to be held at the Hyatt Regency Hotel in Knoxville, February 21-22. Under the theme "Energy - the Role of Industry and Technology," WATtec will provide an interdisciplinary approach to the part played by engineering and technical societies and industry in dealing with the energy shortage. Prominent speakers will present invited papers covering a broad spectrum of the areas of current concern.

Featured speakers include Paul R. Vanstrum, vice-president of the Nuclear Division, who will deliver the keynote address on February 21, and Dixy Lee



Miss Ray

Hart

Ray, Chairman of the U. S. Atomic Energy Commission, who will be principal speaker at the dinner banquet February 22. Also participating in the banquet program will be Robert J. Hart, manager of AEC's Oak Ridge Operations; and Aubrey J. Wagner, chairman of the Tennessee Valley Authority. Wallace B. Behnke, executive vice-president of Commonwealth Edison, Chicago; and Fred N. Peebles, dean of The University of Tennessee's college of engineering, will be luncheon speakers.

The Nuclear Division's industrial cooperation exhibit will be one of the displays in the hotel lobby.

Other groups

WATtec is sponsored by the Northeast Tennessee Section of the American



Wagner

Vanstrum

Welding Society and the Oak Ridge Section of the American Society for Non-destructive Testing, and is being presented in concert with the other professional engineering and technical societies in the Knoxville - Oak Ridge area participating in the Engineers Week activities. Chairman of the WATtec program is Fred D. Mundt of the Nuclear Division.

The other groups participating in the Engineers Week program include the American College of Surveyors, American Institute of Architects, American Institute of Chemical Engineers, American Institute of Industrial Engineers, American Society of Civil Engineers, American Society of Certified Engineering Technicians, American Society of Heating, Refrigerating and Air-Conditioning Engineers, American Society for Metals, American Society of Mechanical Engineers, American Society of Safety Engineers, Institute of Electrical and Electronic Engineers, Instrument Society of America, Society of Manufacturing Engineers, Tennessee Society of Professional Engineers and the Knoxville Technical Society.

BUSINESS LAW COURSE

A course in business law entitled "Business and Public Policy," will be offered by the Oak Ridge Chapter of the National Secretaries Association beginning February 19. Classes will be held for five weeks on Tuesday evenings from 6:30 to 8:30 p.m. at the Oak Ridge High School. The instructor will be Professor M. L. Townsend of The University of Tennessee.

For registration and textbooks contact Bettye Burns, CPS education chairman, at 3-1306.

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James A. Young, Editor, Y-12
Ext. 3-7100
Ruby Miller, Assoc. Editor, ORNL
Ext. 3-6421
Keith Bryant, Paducah
Bell 369
Doug Carter, ORGDP
Ext. 3-3017

— Member —
APPALACHIAN INDUSTRIAL
EDITORS' ASSOCIATION
INTERNATIONAL ASSOCIATION OF
BUSINESS COMMUNICATORS

Office
Post Office Box Y
Oak Ridge, Tenn. 37830

George Hudson cited by Civil Air Patrol

George H. Hudson, ORGDP's development maintenance department, has received a merit citation from the Tennessee Wing of the Civil Air Patrol.

The citation reads, in part:

"The outstanding professional skills, knowledge and judgment of Lieut. Comdr. Hudson aided immeasurably in providing the leadership needed to establish the Tennessee Wing with a communications network that is exceptional in every respect.

"The abilities of Hudson, while on many search and rescue missions, civil defense, and effectiveness tests have proven him to have exceptional insight and understanding of the complexity of a search and rescue mission communications work."



NEWLY CERTIFIED — The Oak Ridge Chapter of the Tennessee Society of Professional Engineers recently distributed 22 professional engineering licenses to area engineers. In the front row, from left are Erwin F. Newman, L. Charles Hensley, K. Giks Morgan, J. W. Paul, H. P. Wayland Jr., R. W. Browell, R. N. Rice, T. E. Koprowski and G. E. Peeler. In the second row are George B. Taylor, Alfred M. Smith, George L. Davis, Robert S. Hamby, Robert K. McGrath, Lyle F. Lieber and James E. Beavers. In the third row are Robert P. Nerger Jr., John C. Moyers and Olin A. Kelly.

Nuclear Division Deaths

Johnny Burrage, Paducah plant's Power, Utilities and Chemical Division, died January 16.

Mr. Burrage, a resident of 1039 Monroe St., Paducah, was the son of the Rev. and Mrs. Charlie Burrage and brother of Sam Burrage, newsman for WPS-TV. He is also survived by his wife, Mrs. Louvenia Burrage, and daughters: Gina, LaShaun, Bridgett and Zsa Zsa.



Mr. Burrage

Mr. Burrage was well known in golfing circles in the Paducah area. He was the originator of the Whitesides Invitational Tournament where proceeds were used in the sickle cell anemia fight.

RETIRED ORGDP ANALYST

Thursby R. Barker, 125 Sheridan Circle, Oak Ridge, died January 11 in the Oak Ridge Hospital. Mr. Barker was retired from the Oak Ridge Gaseous Diffusion Plant. He is survived by his wife and two sisters. Funeral services were held in Oak Ridge, with burial in Louisville, Ky.

John E. Clemons, a long-time Y-12 employee, died January 11. He was employed in the Fabrication Division.

A native of Knoxville, Mr. Clemons worked for the Atomic Energy Commission and Maxon Construction, before coming to Y-12 in 1954.



Mr. Clemons

The Clemons home is at 3384 Coffman Drive, Knoxville. Survivors include his wife, Mrs. Betty S. Clemons; sons, James S. and Donald Clemons; his mother, and stepfather, Mr. and Mrs. Joe Jenkins; three sisters and four brothers.

Funeral services were held at the Berry Funeral Home, Knoxville, with the Rev. Robert W. Walker and the Rev. A. Blaine Burgess officiating. Burial followed in the Edgewood Cemetery.

Charlie W. Watson, a machining foreman in the Fabrication Division in Y-12, died January 22.

A native of Riverside, Ala., Mr. Watson served in the U. S. Army before joining Union Carbide in 1951. He also owned and operated a bicycle and lawnmower repair shop in Oak Ridge.



Mr. Watson

Survivors include his wife, Mrs. Esther H. Watson, 125 Manchester Road, Oak Ridge; three daughters, Carol Ann Cummings, Katie Fraley and Mary Louise Watson; a stepmother, Mrs. Porter Watson; four sisters, two brothers and one grandchild.

Services were held at the Martin Funeral Home with the Rev. C. E. Weber officiating. Burial was in Valhalla Memorial Cemetery, Birmingham.

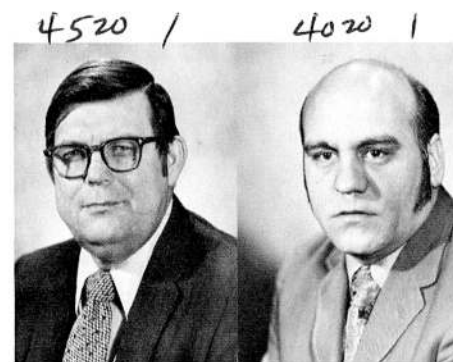
Kaufman, Siegfried and Stitt named supervisors at Paducah

Three design engineer supervisors have been named at the Paducah plant, according to an announcement from J. Robert Merriman, Engineering Division superintendent. They are Daniel H. Stitt, Robert H. Siegfried and David H. Kaufman.

Stitt, a native of Illinois, first was employed at the plant as a summer student. He later was a co-op while getting his master's degree in engineering from Southern Illinois University. He became a permanent employee in 1967. Stitt resides in Metropolis, Ill., with wife, Dorothy; son, Daniel Jr.; and daughter, Linda.

Siegfried, a native of Nazareth, Pa., came to work with Carbide from Hannin Associates in 1970. He lives in Calvert City with his wife, Waldean; daughter, Lori, and son, Bradley.

Kaufman, a native of Kalamazoo, Mich., came to work at the Paducah plant in the Engineering Division in 1956. He was previously employed by the Kelso Burnett Electric Co., of Chicago and Catalytic Construction of Oak Ridge. He was at one time employed by F.M. McGraw, prime contractor for the construction of the Paducah Gaseous Diffusion Plant. He lives on Harris Road with wife, Ruth, and sons, David and Mark.



Siegfried

Stitt



Kaufman

Burn-off scheduled for local forests

Plans for controlled burning in forest areas in and around Oak Ridge are being made by the Atomic Energy Commission. The burning, which caused many inquiries and calls to the fire departments last year, began the first of February and will last through March. Controlled burning of this type is usually done during low temperature weather when fire control is easier.

The controlled burning is being done as part of the AEC's forestry management program, under the supervision of Dennis Bradburn, ORNL's Environmental Sciences Division. Bradburn is being assisted by other members of the division.

The purpose of the program is to burn out small scrub hardwoods and undergrowth in the forests in order for the more desired species of trees to develop better. A second purpose of the controlled burning is to rid the forest of litter and other material that could spontaneously or accidentally catch fire.

Only pine plantations are being burned. Fire lines are now being plowed around the plantations to contain the fire within these areas.

Burning is planned along the Turnpike (Highway 58) between Oak Ridge and Blair Road on the north side; both sides of the highway on Bear Creek Road, from the Y-12 Plant to the TVA Industrial site; areas along the Clinch River below Melton Hill Dam; and possibly on Bethel Valley Road, east of the Oak Ridge National Laboratory.

Smoke from the fires will probably be visible most hours of the day and night, although most of the activity will take place during the day. All of the plant fire departments and the city fire departments will be kept aware of plans, and will be available if needed.

THE LAST WORD

If you look forward to Monday more than you do Friday, you're in danger of becoming successful.

PATENTS

Granted

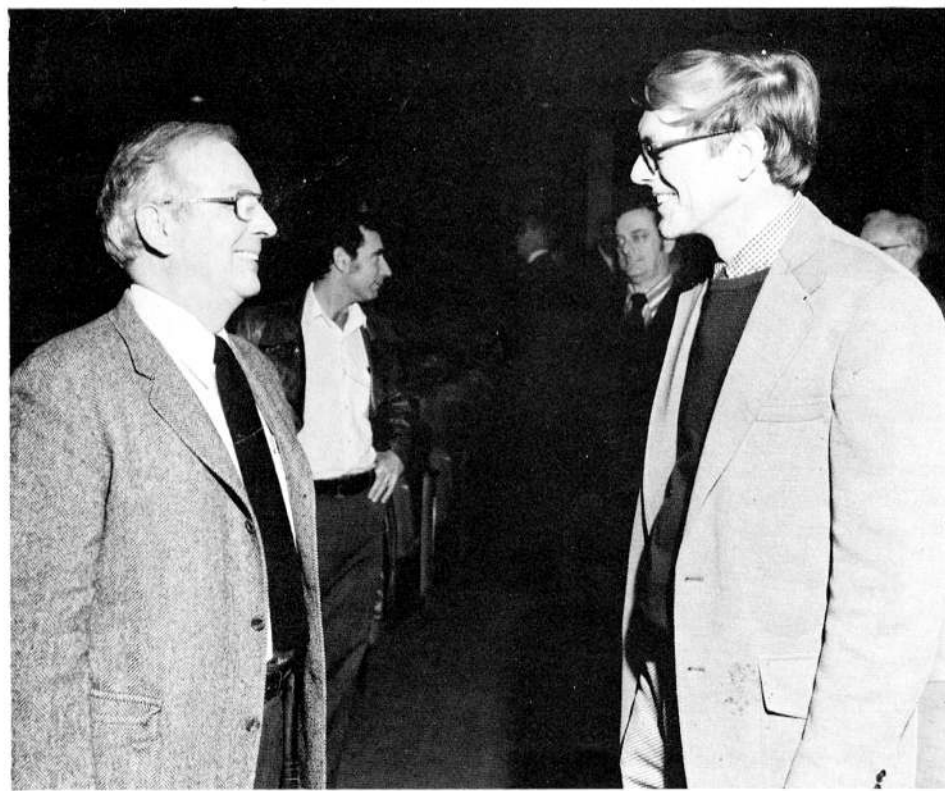
To Kurt A. Kraus, ORNL, for "Process for Treatment of Aqueous Suspensions."

To Clarence W. Houck, Ronald W. Gunkel and Nancy C. Cole, ORNL, for "Brazing Filler Metal for Molybdenum."

To Hubert L. Whaley and Laszlo Adler, ORNL, for "Ultrasonic Flaw Determination by Spectral Analysis."

To Wayne F. Johnson, ORNL, for "Automatic Photomultiplier Tube Voltage Controller."

To Charles F. Baes, Carlos E. Bamberger and Robert G. Ross, ORNL, for "Recovery of Protactinium from Molten Fluoride Nuclear Fuel Compositions."



STATE OF THE LABORATORY — Floyd Culler, Deputy Director of ORNL, and Herman Postma, Director, are shown following Culler's presentation of the "State of the Laboratory Address" recently. Iran L. Thomas and Roy Pruett are shown in the background.

WANTED



Y-12 PLANT

RIDE or will join car pool from Broadacres subdivision, Powell, to any portal in Y-12, straight day.

RIDE from Lind Place, west end of Oak Ridge, to West Portal, straight day. M.A. Davis, plant phone 3-6584.

RIDERS from vicinity of Clinton Marina and Tacora Hills to East and North Portals, straight day. Home phone: Clinton 457-0717, after 5:30 p.m.

RIDE, four days a week, from Sugar Grove Valley Road, to Central Portal, straight day. Frances Stombaugh, plant phone 3-7213, home phone Harriman 882-2700.

CAR POOL members from Brooks Road (East Knoxville), to East, North or Pine Ridge Portals, straight day. Leon K. Smith, plant phone 3-7461, home phone Knoxville 547-1467.

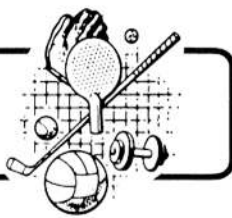
ORNL

RIDE or JOIN CAR POOL from East Drive area, Oak Ridge, to East Portal, 8 or 8:15 a.m. shift. Joanne Zody, plant phone 3-6974, or home phone, Oak Ridge 483-5769.

CAR POOL MEMBERS from Waddell, West Outer or Pennsylvania Avenue area, Oak Ridge, to East or North Portal, 8:15 a.m. shift. Tom Burnett, plant phone 3-6939 or home phone 483-1975; or Dick Reed, plant phone 3-1901 or home phone 483-3458.

RIDE from apartment near Atomic Speed and Custom Shop on Oak Ridge Highway to East or South Portal, 8 or 8:15 a.m. shift. Carolyn Stephens, plant phone 3-6974.

RECREATIONOTES



ORNL BOWLING

The A League began a new season with the Half Frames and Ten Pins ahead of the pack. Dick Raridon rolled a 250 handicap single on opening night.

The Damagers hold down the lead in the C League, miles ahead of the Be-Bops. G. Samuels and E.B. Cagle both rolled singles of 209, with Samuels' game going to a 239 with handicap added. F.A. Kappelmann put a 637 series on the boards.

The Ladies' League opens with the Hi-Balls in front, only an inch ahead of the Strikettes and the Pick-Ups. Georgia Guinn rolled a 226 scratch single recently, and a 528 series.

The Strikers keep an unblemished record in the Family Mixed League, ahead of the Oops and Right Ons.

Edith Dickworth and Dan Kessell copped honors on opening night.

Y-12 BOWLING

The Rollmasters rolled into top place in the C League, with only two nights into the new league season. Joe Morgan, Rounders, rolled a 237 scratch, 253 handicap game . . . and J.C. Kendra rolled series of 611 and 665.

The Alley Cats stand atop the Mixed League, only a breath ahead of the Hits & Misses.

Dick Huber holds individual highs thus far, with a game of 246 and a series of 629.

The Playboys are a slight favorite just now in the Classic League, as their "Tip" Tipton rolled a 223, 598 scratch score recently.

COMPANY Service

20 25 30

GENERAL STAFF 30 YEARS

Frances H. Weaver.

PADUCAH 30 YEARS

J. Channing Hale, Victor G. Katzel and Robert W. Levin.

20 YEARS

Hollis E. Hughes.

ORNL 30 YEARS

Osmer M. Garrett, Edgar L. Rawlings Jr., James B. Lankford, Frederick A. Kappelmann Jr., Farris G. Killian, Arthur L. Allen and Ralph G. Nicol.

Harve A. Dalton, John G. Byrd, Robert E. Toucey, George E. Pearson and Reynold G. Berggren.

25 YEARS

Earl D. Bridges, Ruby E. Sharp, Frances L. Ball, Calvin C. Cherry, Charles E. Clifford Jr., David E. Rosson, Irving Spiewak and Paul L. Jude.

20 YEARS

Alfred M. Smith, Edwin R. Eastwood, Boss Davidson, Robert W. Peelle, Maxwell S. Montgomery, Rush M. Hamley and Arnold Ratliff.

Alvin C. Jenkins, Jack J. Spradley, Warren B. Parsley, Stanley K. Denny and William B. Anthony.

VOLLEYBALL

It looks like a down-to-the-wire play-off for the two league-leading volleyball teams, as The Pack and the Over-the-hill Gang have lost only one match each.

League standings follow:

ATOMIC LEAGUE

Team	W	L
Pack	27	1
Hawks	24	3
Taxi Squad	16	5
The Gang	16	5
Old Men	12	12
Funky Wambats	8	16
The Quarks	7	20
Rad-Fizz	7	20
Jokers	6	18
Electric Bananas	4	20

NUCLEAR LEAGUE

Team	W	L
Over-the-hill Gang	20	1
Pogo's	20	7
Anti-Quarks	18	9
Newcomers	14	10
Bawlers	15	12
Sloths	13	11
Bombers	11	10
Artie's Army	10	14
The Neutrals	2	22
TAT (Dropped)	0	27

BASKETBALL

Five teams still claim only-one-loss records in the two Carbide Basketball Leagues, as play tightens in every direction.

League standings follow:

ATOMIC LEAGUE

Team	W	L
Has Beens	11	1
G B U's	10	1
Bombers	8	2
Testers	8	3
Grundy Express	8	4
Underdogs	5	6
Electrodes	4	7
Possum Soup	3	9
73'ers	2	9

NUCLEAR LEAGUE

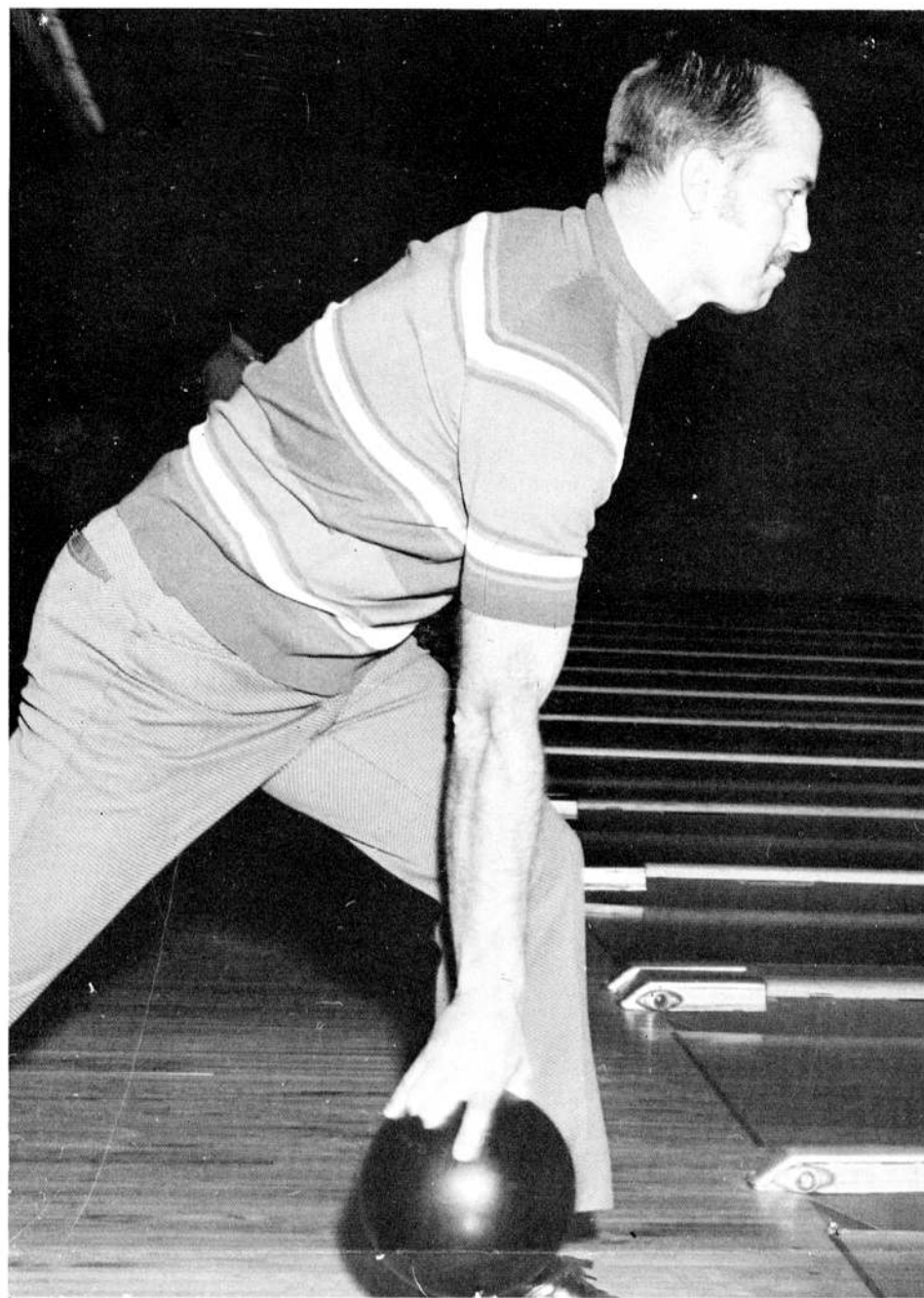
Team	W	L
COE	10	1
Wildcats	9	1
Rolling Bones	8	1
Bottlenecks	7	3
H - Shift	4	5
Just-For-Fun	4	7
Chi-Town Hustlers	4	7
The Gunners	2	6
Eco-Trolls	2	8
Isomets	0	9

ORGDP BOWLING

The Sandbaggers and Amps lock in a tie for the lead in the Wednesday League, only one point ahead of the Protectors, in the league's early light.

Frank Clouse recently rolled a handicap game of 254, and Seth Wheatley counted a 678 handicap series!

The Women's League gave Oleta Carden a 604 scratch, 679 handicap series recently! The Payoffs grabbed the only skunk of the night, a sweeping win from the Uptowners. The BYOB's hold a scant lead over the Uptowners and the Pinups.



PROPER FORM — ORNL's Carlos Brooks concentrates on the 10 pins straight ahead, in preparation for the All Carbide Bowling Tournament set for the second and third weekends in March.

ALL CARBIDE BOWLING TOURNAMENT

Two big week-ends, possibly three, are set in March for Carbide bowlers. March 9, 10 and 17, 18, and possibly the 23rd, if needed, are dates selected for the annual All Carbide Tournament.

Deadline for entering the big event is next Friday, February 15. Entry forms are available from all league secretaries, and are also available at the three Oak Ridge plants: in Y-12 at the Recreation Office, Building 8711-5; in ORNL, in K-113, 4500N Building; and at ORGDP, in Room 136 of K-1001 Building.

Established handicaps will be used in the big tournament . . . rules are available at the same places entries are.

Paducah's Coltharp teaches driving course

Hugh G. Coltharp, who recently received certification as a safety professional, has completed an instructional course of the National Safety Council's Defensive Driving program for the men of the Third Battalion, Second Brigade of the 100th Division located in the Purchase Area of western Kentucky.

Coltharp, Safety Engineer of the Paducah Plant Industrial Relations Division, has provided the instruction in Defensive Driving for many civic, service and educational groups throughout the area as well as for the employees of the plant.

THE LAST WORD

One big trouble with doing nothing is — you can't stop and rest.



Walt Wendolkowski was the big hero recently in the Tuesday Night League, rolling a single of 235, 258 handicap . . . and a series of 599, 668! The Double X Team still holds a rather substantial lead over the Atoms.

The Medicine Chest

(Editor's Note: Dr. Lincoln alternates his regular column with "The Medicine Chest," where he answers questions from employees concerning their health in general. Questions are handled in strict confidence, as they are handled in our Question Box. Just address your question to "Medicine Chest," NUCLEAR DIVISION NEWS, Building 9704-2, Stop 20, or call the news editor in your plant, and give him your question on the telephone.)

By T. A. Lincoln, M.D.

QUESTION: "There is a 'nut' in my department who is constantly boosting Vitamin E. Is there anything to all his fantastic claims?"

ANSWER: Since you didn't enumerate this person's specific claims, I can't support or deny them. I can, however, give you a capsule summary on the present status of Vitamin E.



This compound has been of great interest to biologists who study cellular metabolism, nutritional interactions and aging. Because so many interesting things have been observed in the laboratory, it is not surprising that "fantastic" claims have been made for its value in humans. There has almost been an embarrassment of riches in biochemistry, but distressingly modest evidence of value in human nutrition has been proven. There is no well-defined Vitamin E deficiency disease in adults comparable to scurvy from a Vitamin C deficiency.

Vitamin E occurs in large amounts in soybean, cottonseed and corn oils, fish, and in moderate amounts in whole grain cereals, bread and eggs. It occurs in small amounts in fruits and vegetables. In contrast to the fairly rapid turnover in the body of some of the water soluble vitamins such as B and C, fat soluble Vitamin E turns over slowly. As a consequence it would require many months on a severely deficient diet before any deficiency state would occur. The average American diet has adequate Vitamin E so an inadequacy is unlikely.

Its proven use is in premature infants who have a special type of anemia in which the red blood cell membrane is weakened. Many nutritionists recommend its use in patients who have malabsorption diseases in the intestines, where fat soluble vitamins are not adequately absorbed. Other possible uses include supplementation in patients with cystic fibrosis, cirrhosis, pancreatic insufficiency and peripheral vascular disease.

There is no evidence that Vitamin E slows aging, increases sexual capability, prevents coronary heart disease and cancer, or improves muscular dystrophy. The Recommended Dietary Allowance (RDA) is 30 International Units (IU) for adult males and for pregnant and lactating women. For other women the RDA is 20-25 IU. RDA has had to be based on the usual range of intake rather than the minimum amount to prevent a deficiency plus a wide margin of safety, the standard used for other vitamins. Vitamin E is apparently not toxic so people who

consume amounts significantly above the RDA at least are not harming themselves.

QUESTION: "Do you get enough questions for your 'Medicine Chest'?"

ANSWER: Sadly - no. If this question and answer approach is to continue, I'll have to have more. I would appreciate general questions but will attempt to comment on some specific personal medical problems if enough information is given.

QUESTION: "Are there any hazards to ear piercing?"

ANSWER: Yes, if not done carefully. Unless the instrument is carefully sterilized, there is the possibility of infection and an abscess which could cause an ugly scar. If the piercing is done by someone who performs it for several people, there is the possibility of transmitting the hepatitis virus on the unsterile instrument. To destroy this virus, the instrument has to be thoroughly washed in soap and water and then boiled for 20 minutes or autoclaved at 121°C for 15 minutes, or soaked in a potent antiseptic such as 2 percent glutaraldehyde or 10 percent formalin for 30 minutes. Heating a needle to a cherry red will certainly kill the virus. Since soaking the instrument in alcohol is not adequate, just wiping it off with an alcohol sponge would be grossly negligent.

COMMENT: To the questioner who wanted to know whether saltpeter was really used years ago to suppress sexual appetites of young men in boarding schools and the military, please be patient, I have finally found a reference dated 1874 which will be hard to get. It is surprising how common the story of the effects of saltpeter and its use was about 25-50 years ago, and still no reports seem to have appeared in the medical literature. It was probably largely a myth which had its effect by suggestion. Saltpeter is certainly not used for such a purpose now because there are many other drugs which are effective. When the reference arrives I'll report what they thought in the late 1800's.

A Common Cancer

Colon-rectum cancer affects both men and women, and, at this point, it's the second deadliest cancer in terms of number of lives lost each year. But, the outlook would be better, the American Cancer Society reports, if everyone over 40 had a "procto" as part of a periodic health checkup.

'Leap-frog' assignments cited by Ada Misek in ORNL career

We've all heard of "whirl-wind courtships" and "fly-by-night affairs," but an ORNL employee has just coined a new phrase. Ada Misek describes her career at ORNL during the past nine months as a series of "leap-frog" assignments. Mrs. Misek was a secretary in April, a reports editor in May and an accounting clerk in August.

Mrs. Misek began her career with Union Carbide in 1954 as secretary to the assistant superintendent of the Plant and Equipment Division. In addition to her routine secretarial duties, Mrs. Misek served as librarian, reports editor, affirmative action representative and dean of summer students for the Division. After receiving certification as a professional secretary, she organized a clerical training program in the Division, and was later instrumental in getting a modified program set up by Personnel Development at ORNL.

Degree in business

In her "spare" time, Mrs. Misek attended The University of Tennessee's night school and earned a B.S. degree in business administration in 1972. Shortly afterwards she was offered a job as reports editor in the Urban Research Group, which she promptly took. She had no more than moved into her new office and settled down to learning the job at hand, when the Finance and Materials Department offered her the accounting job. Since she had always been fascinated by accounting and related work, she decided to give it a try.

Mrs. Misek presently works in a group whose responsibility is to monitor "Work for Other Federal Agencies" cost accounts. Included are the research and development programs and other assistance which are carried out at ORNL for other Federal agencies on the basis of interagency agreement. Mrs. Misek is involved in the day-to-day communications that are required to maintain up-to-date information on the status of agreement negotiations, proposals, cost estimates, schedule of work and the details of continuous program changes.

Sense of responsibility

All of this sounds terribly confusing and complicated, but Mrs. Misek enjoys her work. In discussing some of the aspects of this job that are different from her previous jobs, she cites "challenge" and "responsibility." "As a secretary, I was more or less told what to do, and I knew my boss would follow up because it was ultimately his responsibility. In this job, I know that I am held responsible for anything and everything I do - my errors as well as a job well done. It gives me a great sense of awareness and responsibility, as well as a challenge to do it right," says Mrs. Misek.

Mrs. Misek has taught classes in the Oak Ridge High School's adult education program for several years. She also teaches in the ORNL in-house education program.

Mrs. Misek, who is a licensed real estate salesperson, is a member of the interviewing section of the Oak Ridge Historical Society. She holds membership in several professional and civic organizations, and is currently president of the



SENIOR ACCOUNTING CLERK — Ada Misek, Finance and Materials Division at ORNL, says what she enjoys most about her new job is the challenge and sense of responsibility.

Business and Professional Women's Club in Clinton.

Mrs. Misek and her husband, L.J., live in Clinton. They have two married children.

Calendar of EVENTS

TECHNICAL February 13

Chemical Technology Division Seminar: "Mass Transfer at a Turbulent Liquid-Liquid Interface," J. A. Klein; "Axial Dispersion and Mass Transfer in Open Bubble Columns," H. D. Cochran. Central Auditorium, Building 4500N, 3 p.m.

February 20

Chemical Technology Division Seminar: "LMFBR Reprocessing Design Studies," A. R. Irvine, E. L. Nicholson and O. O. Yarbro. Central Auditorium, Building 4500N, 3 p.m.

COMMUNITY February 8

Oak Ridge Civic Music Association presents: Lili Kraus, pianist. Oak Ridge High School Auditorium, 8:15 p.m. Admission: adults \$5; students \$2.50.

February 9-10

Junior Playhouse presents: "Winter-thing." Playhouse, 1 and 3 p.m. Admission: \$1.

February 10

Oak Ridge Chapter of Hadassah presents: An Auction of Original Art. Alexander Motor Inn, 2 p.m. exhibition showing, 3 p.m. auction time.

February 11

Playhouse Tryouts "You Know I Can't Hear You When the Water's Running." Playhouse, 7:30 p.m. Everyone welcome.

Mrs. Osborne named ORGDP stores leader

QUESTION BOX



(Continued from page 1)

concerning such a change. If such a change is made, the Company will give as much advance notice as possible to affected employees.

Fixed income fund interest at 7.75 %

The Metropolitan Life Insurance Company has announced that the guaranteed effective annual interest rate for 1974 on all money in the Fixed Income Fund will be 7-¾ percent. This rate was 7-½ percent in 1973.

The opportunity to deposit money into the Fixed Income Fund was added to the Personal Investment Account portion of the Union Carbide Savings Plan on July 1, 1973. Participants in the Plan may invest all or part of their savings and related company contributions in the Fixed Income Fund and the principal is guaranteed by the Metropolitan Life Insurance.

The rate of interest on the Fixed Income Fund is established at the beginning of each year and is guaranteed to be in effect for the entire year.

Employees with three or more years of Company Service who want to begin making deposits into the Fixed Income Fund should contact their Benefit Plans or Insurance Office for information about this method for building long-term savings, which can be used to supplement their retirement income from the Pension Plan and Social Security benefits.

Larry R. Phillips named Y-12's information, classification head

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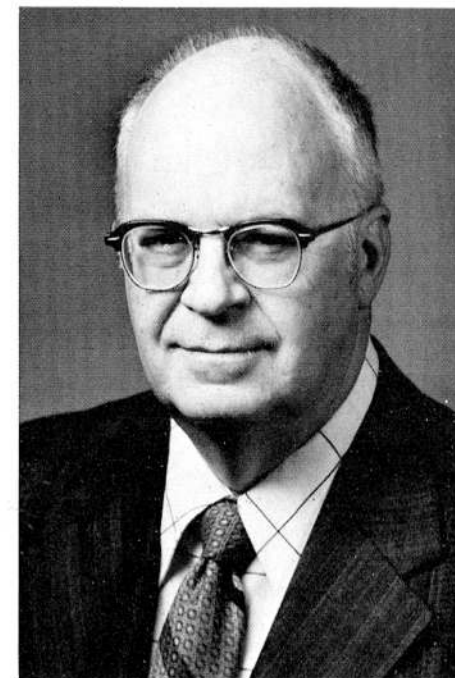
The appointment of Lawrence (Larry) R. Phillips to the position of classification and information officer for the Oak Ridge Y-12 Plant has been announced by Y-12 Plant Superintendent Jack M. Case.

Phillips, who has served as the Plant's classification officer since 1971, will assume the additional duties of information officer February 1. In this position he will be responsible for administering the Plant's classification and information control activities in accordance with the policies and procedures of the Atomic Energy Commission and The Nuclear Division.

A native of Alma, Mich., he received his B.S. degree at Alma College and his Ph.D. in physical-analytical chemistry at the University of Indiana. Before joining the Union Carbide organization in 1952, he taught in several colleges and universities and was employed in the chemical industry.

From 1952 to 1955, he was in Oak Ridge National Laboratory's Materials Chemistry Division. He transferred to the Y-12 Plant Development Division in 1955 and served in a number of positions before being appointed to the classification post in 1971.

His wife is the former Elizabeth Frevert, also of Alma, and they live at 501 Michigan Avenue, Oak Ridge. They have four grown children.



L. R. Phillips

Energy conserving

(Continued from page 2)

Imaginative posters and stickers concerning energy conservation have been prepared by the graphic arts departments at each facility. Information on fuel losses caused by improper vehicle operation and maintenance and energy conservation tips for the home, has been distributed to employees through official bulletins and the Nuclear Division News.

Everyone in the Nuclear Division seems to be more energy conscious, and there is an ever-growing feeling that although minor discomforts and inconveniences may be encountered through conservation programs, it is certainly "better to do with less than do without."

Calendar of EVENTS

COMMUNITY February 11

Art Center Film Club presents: "Closely Watched Trains," Czechoslovakia. Jefferson Junior High School, 8 p.m. Admission: adults \$1.50; students \$1.

PATENTS Granted

To John W. Strohecker, Y-12, for "Apparatus for Removing Oil and Other Floating Contaminants from a Moving Body of Water."



ORNLERS RECENTLY CERTIFIED — Five ORNL men were recently certified as licensed professional engineers in the State of Tennessee. Standing, from left are William R. Whitson and Robert E. Brooksbank, Chemical Technology Division, and Robert E. Toucey, Instrumentation and Controls Division. Seated are John R. Parrott and Robert W. Horton, both of the Chemical Technology Division.



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